

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1-3. (canceled)

4. (previously presented) The composition of claim 34 wherein each of the 2'-substituent groups of each Q or each Z is -F, -O-CH₂CH₂-O-CH₃, -O-C₁-C₁₂ alkyl, -O-CH₂-CH₂-CH₂-NH₂, -O-(CH₂)₂-O-N(R₁)₂, -O-CH₂C(=O)-N(R₁)₂, -O-(CH₂)₂-O-(CH₂)₂-N(R₁)₂, -O-CH₂-CH₂-CH₂-NHR₁, -N₃, -O-CH₂-CH=CH₂, -NHCOR₁, -NH₂, -NHR₁, -N(R₁)₂, -SH, -SR₁, -N(H)OH, -N(H)OR₁, -N(R₁)OH, -N(R₁)OR₁ or -O-CH₂-N(H)-C(=NR₁)[N(R₁)₂]; and

wherein each R₁ is, independently, H, a protecting group or substituted or unsubstituted C₁-C₁₂ alkyl, C₂-C₁₂ alkenyl, or C₂-C₁₂ alkynyl wherein the substituent groups are selected from halogen, hydroxyl, amino, azido, cyano, haloalkyl, alkenyl, alkoxy, thioalkoxy, haloalkoxy or aryl.

5. (previously presented) The composition of claim 34 wherein each of the 2'-substituent groups of each Q or each Z is -F, -O-CH₃, -O-CH₂CH₂-O-CH₃, -O-CH₂-CH=CH₂, N₃, NH₂, NHOH, -O-(CH₂)₂-O-N(R₁)₂, -O-CH₂C(O)-N(R₁)₂, -O-CH₂-CH₂-CH₂-NH₂, -O-(CH₂)₂-O-(CH₂)₂-N(R₁)₂ or -O-CH₂-N(H)-C(=NR₁)[N(R₁)₂]; and

wherein each R₁ is, independently, H, a protecting group or substituted or unsubstituted C₁-C₁₂ alkyl, C₂-C₁₂ alkenyl, or C₂-C₁₂ alkynyl wherein the substituent groups are selected from halogen, hydroxyl, amino, azido, cyano, haloalkyl, alkenyl, alkoxy, thioalkoxy, haloalkoxy or aryl.

6. (previously presented) The composition of claim 34 wherein each of the 2'-substituent groups of each Q or each Z is -F, -O-CH₂CH₂-O-CH₃, -O-CH₃, -O-CH₂-CH=CH₂ or -O-CH₂-CH-CH₂-NH(R_j) where R_j is H or C₁-C₁₀ alkyl.

7. (previously presented) The composition of claim 34 wherein each of the 2'-substituent groups of each Q or each Z is -F, -O-CH₃ or -O-CH₂CH₂-O-CH₃.

8-33. (canceled)

34. (currently amended) A composition comprising first and second chemically synthesized oligomeric compounds, wherein:

at least a portion of said first oligomeric compound is capable of hybridizing with at least a portion of said second oligomeric compound;

at least a portion of said first oligomeric compound is complementary to and capable of hybridizing to a selected nucleic acid target;

at least one of said first and second oligomeric compounds comprises a contiguous sequence of linked nucleosides wherein the sequence defines an alternating motif having the formula:

5'-Q(-L-Z-L-Q)_n(-L-Z)_{nn}-3'

wherein:

each L is an internucleoside linking group;

~~each Q or each Z is, independently, a nucleoside having a 2'-substituent group that is other than H or OH;~~

~~the other of each Q or each Z is a β -D-deoxyribonucleoside;~~

each Q is a nucleoside having a 2'-substituent group that is other than H or OH and each Z is a β -D-deoxyribonucleoside; or

each Q is β -D-deoxyribonucleoside and each Z is a nucleoside having a 2'-substituent group that is other than H or OH;

n is from about 8 to about 14 and nn is 0 or 1; and

each of said oligomeric compounds is from about 18 to about 30 linked nucleosides in length.

35-36. (canceled)

37. (previously presented) The composition of claim 34 wherein only one of said first and said second oligomeric compounds comprises said alternating motif.

38. (previously presented) The composition of claim 37 wherein both of said first and said second oligomeric compounds independently comprise said alternating motif.

39-45. (canceled)

46. (previously presented) The oligomeric compound of claim 34 wherein each of the 2'-substituent groups of each Q or each Z is -F or -O-CH₃.

47-48 (canceled)

49. (previously presented) The composition of claim 34 wherein each Z is a β -D-deoxyribonucleoside.

50. (previously presented) The composition of claim 34 wherein each Q is a 2'-fluoro nucleoside.

51. (previously presented) The composition of claim 34 wherein each Q is a 2'-O-CH₃ nucleoside.

52. (canceled)

53. (original) The composition of claim 34 wherein said first oligomeric compound further comprises a 5'-phosphate group.

54. (original) The composition of claim 34 wherein said second oligomeric compound further comprises a 5'-phosphate group.

55. (original) The composition of claim 34 wherein each of said first and said second oligomeric compounds independently, comprise a 5'-phosphate group.

56. (original) The composition of claim 34 wherein said first oligomeric compound comprises a 3'-terminal OH group.

57. (original) The composition of claim 34 wherein the nucleosides of each of said first and said second oligomeric compounds are linked by phosphodiester internucleoside linking groups.

58. (original) The composition of claim 34 wherein the nucleosides of each of said first and said second oligomeric compounds are linked by phosphorothioate internucleoside linking groups.

59. (original) The composition of claim 34 wherein the nucleosides of one said first and said second oligomeric compound are linked by phosphorothioate internucleoside linking groups and the nucleosides of the other of said first and said second oligomeric compound are linked by phosphodiester internucleoside linking groups.

60. (original) The composition of claim 34 wherein the nucleosides of said first oligomeric compound are linked by phosphorothioate internucleoside linking groups and the nucleosides of said second oligomeric compound are linked by phosphodiester internucleoside linking groups.

61. (original) The composition of claim 34 wherein each of the nucleosides of said first and said second oligomeric compound are independently linked by phosphorothioate or phosphodiester internucleoside linking groups.

62. (original) The composition of claim 34 wherein each of the nucleosides of said first and said second oligomeric compound are independently linked by an internucleoside linking group selected from the group consisting of phosphodiester, phosphorothioate, chiral phosphorothioate, phosphorodithioate, phosphotriester, aminoalkylphosphotriester, methyl phosphonate, alkyl phosphonate, 5'-alkylene phosphonate, chiral phosphonate, phosphinate, phosphoramidate, 3'-amino phosphoramidate, aminoalkylphosphoramidate,

thionophosphoramidate, thionoalkylphosphonate, thionoalkylphosphotriester, selenophosphate and boranophosphate.

63. (previously presented) The composition of claim 34 wherein each of said first and said second oligomeric compounds comprise said alternating motif.

64. (canceled)

65. (previously presented) The composition of claim 63 wherein the 2'-substituent group of each Q is 2'-F or 2'-O-CH₃.

66-71. (canceled)

72. (original) The composition of claim 34 further comprising at least one conjugate group.

73. (canceled)

74. (original) The composition of claim 34 wherein at least one of said first and said second oligomeric compounds further comprises at least one terminal cap moiety attached at the 3'-end, the 5'-end or both the 3'-end and the 5'-end.

75. (original) The composition of claim 74 wherein said terminal cap moiety is an inverted deoxy abasic moiety.

76. (original) The composition of claim 74 wherein one of said first and second oligomeric compounds is a sense strand and wherein said sense strand comprises a terminal cap moiety at one or both of the 3'-terminal and the 5'-terminal ends.

77. (original) The composition of claim 76 wherein said terminal cap moiety is an inverted deoxy abasic moiety.

78. (original) The composition of claim 34 wherein said first and said second oligomeric compounds are a complementary pair of siRNA oligonucleotides.

79-93. (canceled)

94. (previously presented) The composition of claim 34 wherein each of said first and second oligomeric compounds has from about 21 to about 24 nucleosides .

95. (original) The composition of claim 34 wherein said first oligomeric compound is an antisense oligonucleotide.

96. (original) The composition of claim 34 wherein said second oligomeric compound is a sense oligonucleotide.

97-103. (canceled)

104. (previously presented) The composition of claim 34 further comprising one or more overhangs.

105. (new) The composition of claim 34 wherein said first oligomeric compound is complementary to and capable of hybridizing with said second oligomeric compound.